

WHAT IS CLAIMED IS:

1. A method for manufacturing an ink jet recording head having an exothermic resistor, an ink orifice provided in correspondence to said exothermic  
5 resistor, and a nozzle channel communicating with said ink orifice, with a movable member formed in said nozzle channel somewhere between said exothermic resistor and an ink inlet for supplying ink into said nozzle channel in such a configuration that a bubble  
10 generated in the ink in said nozzle channel by heat generated by said exothermic resistor is utilized to discharge the ink from said ink orifice, comprising the step of:

preparing a substrate provided with said  
15 exothermic resistor;

applying such first resin on said substrate as to provide a first mold shape for forming said nozzle channel and said movable member;

forming said first mold shape using said first  
20 resin;

applying, on said substrate, second resin over said first mold shape for forming said nozzle channel and said movable member; and

removing said first mold shape.

25

2. The method according to claim 1, wherein:  
said first resin is a photo-resist; and

said step of forming said first mold shape includes a step of using a mask pattern having a width not larger than a resolution limit of said photo-resist to thereby form said movable member of  
5 said first mold shape.

3. The method according to claim 1, wherein:  
said step of applying said first resin is preceded by a step of applying a third resin which  
10 provides a second mold shape used to form said nozzle channel on said substrate; and

said step of applying said first resin involves applying said first resin on said substrate in such a manner as to cover said second mold shape.  
15

4. The method according to claim 1, wherein said step of applying said first resin is preceded by a further step of forming a projecting barrier at a corresponding position between said movable member  
20 and said inlet on said substrate.

5. An ink jet recording head utilizing a bubble generated in ink in a nozzle channel when the ink is heated by an exothermic resistor, to discharge the  
25 ink from an ink orifice, comprising:  
a substrate provided with said exothermic resistor; and

said nozzle channel formed on said substrate,  
wherein a movable member is formed in said  
nozzle channel somewhere between said exothermic  
resistor and an ink inlet for supplying the ink into  
5 said nozzle orifice, said movable member having a  
supporting point thereof on such a wall of said  
nozzle channel as to be opposed to said substrate and  
a free end thereof on a surface of said nozzle  
channel on the side of said substrate and being  
10 formed integrally with said wall opposed to said  
substrate.

6. The ink jet recording head according to  
claim 5, wherein said wall and said movable member  
15 are made of resin.

7. The ink jet recording head according to  
claim 5, comprising a restricting section between  
said movable member in said nozzle channel and said  
20 ink inlet, for restricting said movable member from  
being displaced toward said ink inlet.

8. The ink jet recording head according to  
claim 7, wherein said restricting section is a  
25 projecting barrier provided on said substrate.

9. The ink jet recording head according to

claim 7, wherein said restricting section is part of a member which makes up an inner side wall of said nozzle channel.

5           10. An ink jet recording head having an exothermic resistor, an ink orifice provided in correspondence to said exothermic resistor, and a nozzle channel communicating with said ink orifice, with a movable member formed in said nozzle channel  
10 somewhere between said exothermic resistor and an ink inlet for supplying ink into said nozzle channel in such a configuration that a bubble generated in the ink in said nozzle channel by heat generated by said exothermic resistor is utilized to discharge the ink  
15 from said ink orifice,

          wherein said movable member is arranged perpendicularly to a surface of a substrate provided with said exothermic resistor on the side of said nozzle channel and has a supporting point thereof on  
20 such a surface of said nozzle channel as to be opposed to said substrate and a free end thereof on a surface of said nozzle channel on the side of said substrate.

25           11. The ink jet recording head according to claim 10, comprising a restricting section between said movable member in said nozzle channel and said

ink inlet, for restricting said movable member from being displaced toward said ink inlet.

12. The ink jet recording head according to  
5 claim 10, wherein a displacement of said movable member toward said ink inlet is smaller than a displacement thereof toward said ink orifice.